

IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A failure recovery method in a dual optical ring network including an inner ring and an outer ring, a plurality of nodes, a first concentrator and a second concentrator, wherein each node includes at least an interface A and an interface B each comprising an input interface and an output interface, said method comprising the steps of:

connecting interface A of every even node and interface B of every odd node directly to said first concentrator and connecting interface B of every even node and interface A of every odd node directly to said second concentrator;

configuring said first concentrator and said second concentrator so as to connect said plurality of nodes to form ~~bi-directional-dual-counter-rotating optical rings~~ two counter-rotating optical rings;

in the event of a failure of a concentrator, configuring interfaces in said plurality of nodes connected to the failed concentrator to loopback configuration; and

configuring said surviving concentrator such that the interfaces of said plurality of nodes are connected in daisy chain fashion so as to form a single optical ring.

2. (Original) The method according to claim 1, said plurality of nodes comprises a plurality of routers.

3. (Original) The method according to claim 1, said plurality of nodes comprises a plurality of routers adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

4. (Original) The method according to claim 1, said first concentrator and said second concentrator are adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

5. (Previously Presented) The method according to claim 1, said plurality of nodes are adapted to detect a failure of either said first concentrator or said second concentrator.

6. (Original) The method according to claim 1, further comprising the step of detecting the failure of either said first concentrator or said second concentrator, and in response thereto sending Spatial Reuse Protocol (SRP) Long Intelligent Protection Switching (IPS) protocol compatible packets advertising said failure.

7. (Original) The method according to claim 1, wherein in the event the number of nodes is even, an equal number of A interfaces and B interfaces are connected to said first concentrator and said second concentrator.

8. (Original) The method according to claim 1, wherein in the event the number of nodes is odd, connecting an optical fiber to said first concentrator and second concentrator and configuring said first concentrator and second concentrator so as to close the inner ring and outer ring.

9. (Currently Amended) A method of connecting a plurality of nodes to a first concentrator and a second concentrator to form a dual optical ring network including an inner ring and an outer ring, each node including an interface A and an interface B, said method comprising the steps of:

connecting interface A of every even node and interface B of every odd node directly to said first concentrator and connecting interface B of every even node and interface A of every odd node directly to said second concentrator;

configuring said first concentrator and said second concentrator so as to connect said plurality of nodes to form ~~bi-directional dual counter-rotating optical rings~~ two counter-rotating optical rings; and

in the event the number of nodes is odd, connecting a pair of optical fibers between said first concentrator and said second concentrator in lieu of a node;

in the event of a failure of a concentrator, configuring interfaces in said plurality of nodes connected to the failed concentrator to loopback configuration; and

configuring said surviving concentrator such that the interfaces of said plurality of nodes are connected to form a single optical ring.

10. (Original) The method according to claim 9, said plurality of nodes comprises a plurality of routers.

11. (Original) The method according to claim 9, said plurality of nodes comprises a plurality of routers adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

12. (Original) The method according to claim 9, said first concentrator and said second concentrator adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

13. (Currently Amended) A recovery method for use in a dual optical ring network including an inner ring and an outer ring, a plurality of nodes, a first concentrator and a second concentrator, wherein the plurality of nodes includes a first node, a second node and a last node and wherein each node includes at least an interface A and an interface B each comprising an input and an output, said method comprising the steps of:

connecting interface B of the first node and interface A of the second node directly to the first concentrator;

connecting interface A of the first node and interface B of the second node directly to the second concentrator;

beginning with [[a]] the first node, configuring said first concentrator and said second concentrator so as to directly connect interface B of a particular node to interface A of its neighboring node;

configuring said first concentrator and said second concentrator so as to directly connect interface B of the last node with interface A of said first node;

in the event of a failure of a concentrator, configuring interfaces connected to the failed concentrator to loopback operation; and

on said inner ring, directly connecting interface A output to interface B input on a neighboring node through the remaining concentrator and directly connecting interface A output of the last node to interface B input of the first node through the remaining concentrator to close the ring.

14. (Original) The method according to claim 13, said plurality of nodes comprises a plurality of routers.

15. (Original) The method according to claim 13, said plurality of nodes comprises a plurality of routers adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

16. (Original) The method according to claim 13, said first concentrator and said second concentrator adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

17. (Previously Presented) The method according to claim 13, said plurality of nodes are adapted to detect a failure of either said first concentrator or said second concentrator.

18. (Original) The method according to claim 13, further comprising the step of detecting the failure of either said first concentrator or said second concentrator, and in response thereto sending Spatial Reuse Protocol (SRP) Long Intelligent Protection Switching (IPS) protocol compatible packets advertising said failure.

19. (Original) The method according to claim 13, wherein in the event the number of nodes is even, an equal number of A interfaces and B interfaces are connected to said first concentrator and said second concentrator.

20. (Original) The method according to claim 13, wherein in the event the number of nodes is odd, connecting an optical fiber to said first concentrator and second concentrator and configuring said first concentrator and second concentrator so as to close the inner ring and outer ring.

21. (Currently Amended) A recovery method for use in a dual optical ring network including an inner ring and an outer ring, an odd number of nodes, a first concentrator and a second concentrator, wherein the plurality of nodes includes a first node, a second node and a last node and wherein each node includes at least an interface A and an interface B each comprising an input and an output, said method comprising the steps of:

connecting interface B of the first node and interface A of the second node directly to the first concentrator;

connecting interface A of the first node and interface B of the second node directly to the second concentrator;

beginning with [[a]] the first node, configuring said first concentrator and said second concentrator so as to directly connect interface B of a particular node to interface A of its neighboring node;

configuring said first concentrator and said second concentrator so as to directly connect interface B of the last node with interface A of said first node;

connecting a pair of optical fibers between said first concentrator and said second concentrator in lieu of a node after the last node;

in the event of a failure of a concentrator, configuring interfaces connected to the failed concentrator to loopback operation;

on said inner ring, directly connecting interface A output to interface B input on a neighboring node through the remaining concentrator and directly connecting interface A output of the last node to interface B input of the first node through the remaining concentrator; and

directly connecting the output interface of the last node to the input interface of the first node through the remaining concentrator to close the ring.